

## GEOLOCATION USING ENHANCED TIMING ADVANCE TECHNIQUES

### Abstract Of The Disclosure

- 5 A method of geolocation that is backward compatible and more accurate than the well-known Cell/Sector ID method is provided. The geolocation method provided comprises the steps of determining a set of candidate locations for the mobile-station based on a timing advance value associated with the mobile-station and determining a location of the mobile-station using the set of candidate locations and signal strength measurements associated with same cell-neighboring sectors or different cell-neighboring sectors.